The following papers were read: -

1. On a Collection of Freshwater Crustacea from the Transval. By Paul A. Methuen, New College, Oxford \*.

[Received October 30, 1909.]

(Plates VIII.-XVIII.†; Text-figures 11 & 12.)

## Introduction.

In the beginning of August 1908, I had the opportunity of visiting the lake district of the Transvaal while out in that country during the Oxford summer vacation. The lakes or pans visited lie in the Carolina district due east of Pretoria near the borders of Swaziland. My object was to study and make as complete a collection of the Crustacean fauna as I could in the time at my disposal. I made Chrissie my headquarters.

Though not the highest point of the veldt, Lake Chrissie is some 6000 feet above the sea-level, and is situated in a slight hollow in the hills; in fact the word "pan" applied to these pieces of water ideally expresses their chief feature, in that they resemble shallow basins to be found in certain parts of the undulating stretches of the veldt. The Ecca sandstone of the Karroo formation characterises the geology of this district. At the time I was there all the pans were very empty, some of them had completely dried up.

It was cold most of the time, especially during the nights.

Lake Chrissie is about twelve iniles in circumference; on the north side the lake is shallow and tends to deepen very gradually towards the centre, where it was found to be five or six feet deep; approaching the southern margin, the tendency is to deepen another foot or two and then to shallow rather rapidly. Though there are no reeds, various weeds grow plentifully in the shallows, especially in the northern parts. Many species of wild-fowl frequent the western end of the lake where it has of late years considerably receded, leaving mud flats behind. Most conspicuous among the birds was the flamingo, whose contrasting colours of black and crimson when on the wing were most striking towards sunset. The bottom of the lake is composed of fine mud. The water was very discoloured, owing to a great extent, I presume, to the activity of the large number of birds on it, and savoured strongly of wild-fowl.

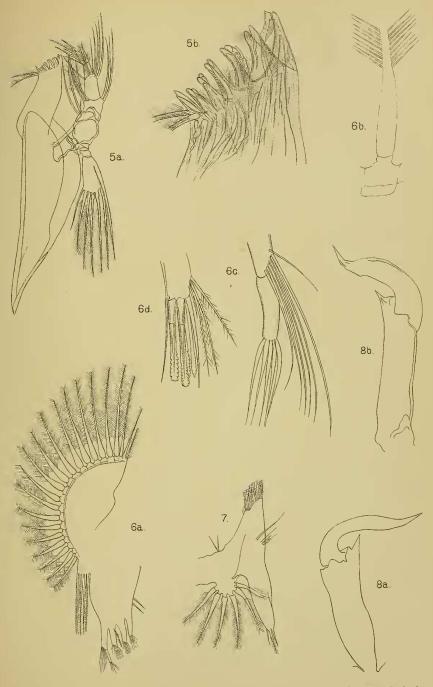
It was in the shallow littoral water that I found the Entomostraca described in this paper, the Ostracoda on the muddy bottoms, the Cladocera and Copepoda a little farther out among the weeds. A small species of Barbel (Barbus anoplus Max

<sup>\*</sup> Communicated by Prof. G. C. BOURNE, D.Sc., F.Z.S. † For explanation of the Plates see pp. 165 & 166.



1-4. CYPRIS SPINOSA.

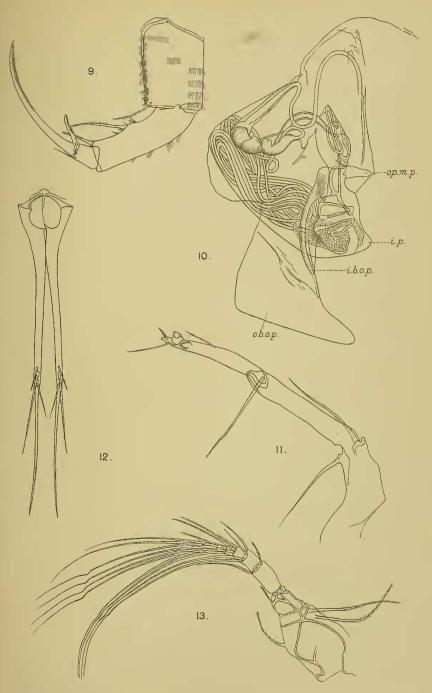




P.A.M.del. M.P.Parken lith.

Edwin Wilson, Cambridge

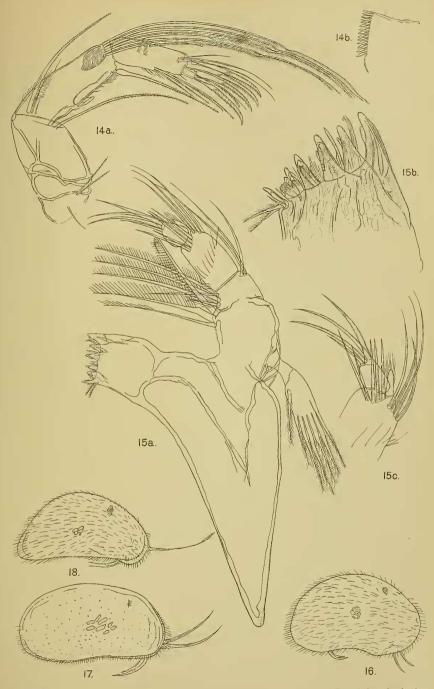




P.A.M del. M.P. Parker, lith.

Edwin Wilson, Cambridge.



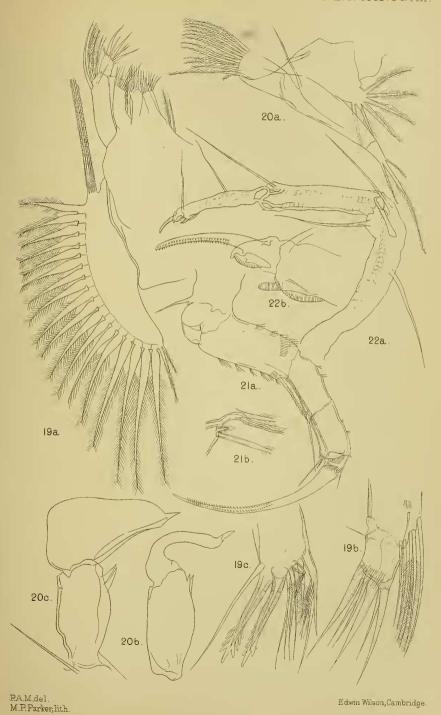


P.A.M. del. M.P.Parker, lith.

Edwin Wilson, Cambridge.

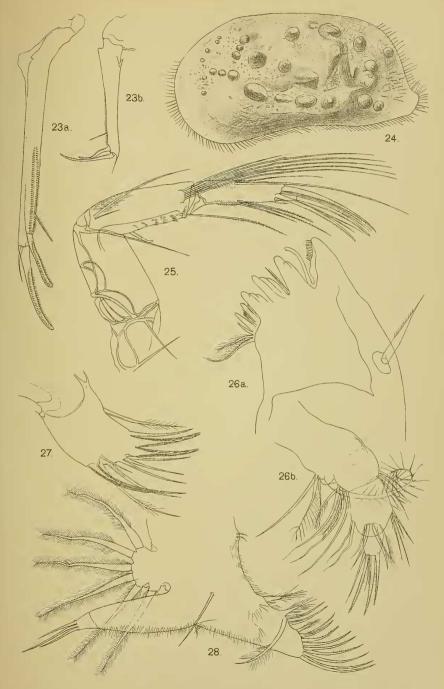
14.15.17. C.GUNNINGI. 16. C. CHRISSIENSIS. 18. C. MASTIGOPHORA.





19-22. C. GUNNINGI.





P.A.M. del. M.P. Parker, lith.

Edwin Wilson, Cambridge.

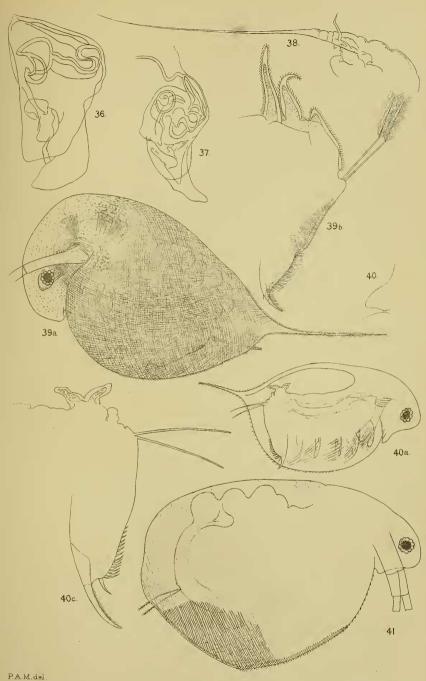




P.A.M.del. M.P. Parker, lith

Edwin Wilson, Cambridge



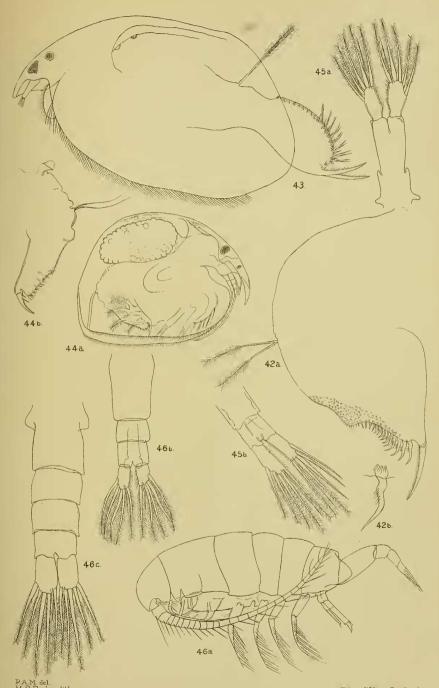


M.P. Parker, lith.

36.C. GUNNINGI. 37.C. CHRISSIENSIS. 38.C. MASTIGOPHORA.

39. DAPHNIA GIBBA. 40.D. PULEX 41. SIMOCEPHALUS CORNIGER.





PParker, lith.

Edwin Wilson, Cambridge
42. S. CORNIGER. 43. LEYDIGIA TRISPINOSA 44 CHYDORUS CAROLINÆ.

45. BROTEAS FALCIFER. 46. METADIAP TOMUS TRANSVAALENSIS.

